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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,772	06/22/2006	David Flattin	0579-1088	8199
466, 7590 YOUNG & THOMPSON 209 Madison Street Suite 500 Alexandria, VA 22314			EXAMINER RONI, SYED A	
			ART UNIT 2194	PAPER NUMBER
			NOTIFICATION DATE 12/21/2010	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

### Office Action Summary

**Application No.**

10/533,772

**Applicant(s)**

FLATTIN ET AL.

**Examiner**

SYED RONI

**Art Unit**

2194

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-944)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/20/2010 has been entered.

### ***Claim Objections***

2. Claims 19 and 20 objected to because of the following informalities: The first occurrence of acronym "APDU" should be spelled out.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3 – 5, 11, 16, 17 and 18 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims **3, 11, 16, 17 and 18** contains the trademark/trade name Java. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35

U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe an applet and a smart card and, accordingly, the identification/description is indefinite.

Claims 4 and 5 are dependent claims and thus also rejected.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 – 8 and 10 – 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Vandewalle et al. (US 2002/0082847 A1) (hereinafter Vandewalle).

Vandewalle discloses;

Regarding **claim 1, A microcircuit card** [i.e., smart card 10 (see figure 2)]

**comprising:**

**at least one data object** [i.e., Applet 12 (page 3, par 0020), (see figures 1, 2, 3 and 4)]  
**associated to at least one first reference local to the card to locally address and**

**execute the data object** [i.e., "skeleton 22 which decodes the APUD message...then forwarded the card application 12 as a request to invoke a method" (page 3, par 0023), (see figure 2), Note, the APDU commands from the terminal 16 are being converted to corresponding method invocation to call a method of the application in the smart card 10. Thus, the method invocations are being used to address and execute the smart card application locally];

**a register** [i.e., table (page 4, par 0030), (see figure 5a and 5b)] **comprising a logical identifier of said object** [i.e., "this table includes a first column which contains an identifier for each of the published methods of an application" (page 4, par 0030), (see figures 5a and 5b)], [i.e., "the third byte of the header...used to identify the specific method to be invoked. Hence, in the example of Fig 5a, the value of the third byte in the header appears in the decoding table" (page 4, par 0030), ( see figures 5a and 5b)] **and the at least one first local reference** [i.e., method m, n, o, i (see figures 5a and 5b)];  
**and**

**a means adapted, on reception of a first message from a terminal** [i.e., "this APUD message is transmitted to the card" (page 3, par 0023)], [i.e., command APUD (see figures 1 and 2)], **said message comprising said logical identifier of the data object** [i.e., "the third byte of the header...used to identify the specific method to be invoked" (page 4, par 0030)], [i.e., APDU byte 01 identifies method (m) of the smart card applet (see figure 5)], **to communicate to the terminal at least one second local reference of the data object** [i.e., "an APDU response message which is transmitted to the terminal" (page 3, par 0024)], [i.e., response APUD (see figures 1 and 2)], **obtained**

**from said at least one first local reference** [i.e., “the card application 12 returns a value to the card skeleton 22. The skeleton converts this value into an APDU response message, which is transmitted to the terminal, via the runtime engine” (page 3, par 0024), (see figure 2)],

**wherein the execution of the data object is performed with only the card directly accessing the data object by using the first local reference** [i.e., the skeleton 22 is performing the decoding of APDU messages into corresponding methods and encoding the methods into corresponding APDU commands inside a smart card 10 (see figure 2)].

Regarding **claim 2, The microcircuit card according to claim 1, further comprising a means for publication of said logical identifier and of said at least one first local reference in said register of the card** [i.e., “table includes...identifier for each of the published methods of an applications” (page 4, par 0030)], [i.e., “published methods” (page 4, par 0032)].

Regarding **claim 3, The microcircuit card according to claim 2, wherein said data object is a Java Card type object belonging to a Java Card applet** [i.e., “application is written in the Java programming language” (page 3, par 0020)], [i.e., “Java applet” (page 2, par 0019)], **the card being wherein said second local reference of said data object conforms to the Java Card standard** [i.e., Java RMI framework (see figure 2)].

Regarding **claim 4, The microcircuit card according to claim 3, wherein said publication** [i.e., “table includes...identifier for each of the published methods of an

applications" (page 4, par 0030)] **is performed at the initialization of said applet** [i.e., "the decoding table is stored...when a session is initiated between the card application and client. The table can be stored...the time that the application is loaded on to the card" (page 4, par 0032)].

Regarding **claim 5, The microcircuit card according to claim 3, wherein the communication means are adapted to communicate an identifier of said applet** [i.e., "table includes...an identifier for each of the published methods of an applications" (page 4, par 0030)] **on reception of said first message** [i.e., the skeleton 22 decodes an APDU message into corresponding method invocation and encode the result to the method invocation to its corresponding APDU message according to the table (see figures 3, 5a and 5b)].

Regarding **claim 6, The microcircuit card according to claim 1, wherein said data object is a computer program, a variable or a computer file** [i.e., Java applet 12 (page 2, par 0019), (see figures 2, 3 and 4)].

Regarding **claim 7, The microcircuit card according to claim 1, wherein on reception of a second message, said communication means communicate all the logical identifiers contained in said register** [i.e., the skeleton 22 decodes an APDU message into corresponding method invocation and encode the result to the method invocation to its corresponding APDU message according to the table (see figures 3, 5a and 5b)].

Regarding **claim 8, The microcircuit card according to claim 1, wherein said second local reference is said first local reference** [i.e., method invocation (see figure 2)].

Regarding **claim 10, A computer equipment of terminal type** [i.e., terminal 16 (see figure 2)] **including means adapted to implement a software application** [i.e., client application 18 (see figure 2)] **including at least one first instruction** [i.e., command APDU (see figures 2, 3 and 4)] **for using at least one data object** [i.e., application 12 (see figures 2, 3 and 4)] **in a microcircuit card** [i.e., smart card 10 (see figure 2)], **said at least one first instruction uses a logical identifier of said object** [i.e., "the third byte of the header...used to identify the specific method to be invoked" (page 4, par 0030)], [i.e., APDU byte 01 identifies method (m) of the smart card applet (see figure 5)] **and the computer equipment comprising:**

**a means for obtaining, from said logical identifier, at least one second local reference of the data object** [i.e., table (page 4, par 0030), (see figure 5a and 5b)], **obtained by the microcircuit card from a first reference of said data object local to said card, said first local reference being associated to the data object to locally address and execute the data object within the card** [i.e., "skeleton 22 which decodes the APUD message...then forwarded the card application 12 as a request to invoke a method" (page 3, par 0023), (see figure 2), Note, the APDU commands from the terminal 16 are being converted to corresponding method invocation to call a method of the application in the smart card 10. Thus, the method invocations are being used to address and execute the smart cad application locally] **the execution of the**



**data object is performed with only the card directly accessing the data object by using the first local reference** [i.e., the skeleton 22 is performing the decoding of APDU messages into corresponding methods and encoding the methods into corresponding APDU commands inside a smart card 10 (see figure 2)],  
**a means for translating said at least one first instruction into at least one second instruction that can be executed on said card** [i.e., skeleton 22 decodes the APDU message into corresponding method invocation (page 3, par 0023), (see figure 3)], **said at least one second instruction using said at least one second local reference** [i.e., the APDU commands from the terminal 16 are being decoded to corresponding method invocation to call a method of the application in the smart card 10], **and a communication means adapted to communicate said at least one second instruction to said card for said use** [i.e., "the decoded message is then forwarded to the card application 12" (page 3, par 23), (see figure 3)].

Regarding **claim 11, The computer equipment according to claim 10,** wherein **said data object is a Java Card type object belonging to a Java Card applet of the microcircuit card** [i.e., "application is written in the Java programming language" (page 3, par 0020)], [i.e., "Java applet" (page 2, par 0019)], **which computer equipment is wherein the obtaining means are adapted to obtain a second reference conforming to the Java Card standard obtained by said card from a first reference of said data object** [i.e., Java RMI framework (see figure 2)].

Regarding **claim 12, The computer equipment according to claim 10,** wherein **the obtaining means are adapted to obtain an identifier of said applet**

[i.e., "an identifier for each of the published methods of an application" (page 4, par 0030)].

Regarding **claim 13, The computer equipment according to claim 10, wherein said data object is a computer program, a variable or a computer file** [i.e., Java applet 12 (page 2, par 0019), (see figures 2, 3 and 4)].

Regarding **claim 14, The computer equipment according to claim 10, wherein it further comprising a means for publication, in a register of said computer system terminal** [i.e., "table includes...identifier for each of the published methods of an applications" (page 4, par 0030)], [i.e., "published methods" (page 4, par 0032)], **a buffer object including an interface identical to that of the data object of the card, that buffer object being adapted to translate an instruction executing on a third-party system and using said logical identifier into at least one second instruction that can be executed on said card and uses said second local reference** [i.e., the skeleton 22 decodes an APDU message into corresponding method invocation and encode the result to the method invocation to its corresponding APDU message according to the table (see figures 3, 5a and 5b)].

Regarding **claim 15, The computer equipment according to claim 14, wherein the publication means are adapted to obtain and to publish in the register of said computer system terminal all the buffer objects of the data objects published by said card** [i.e., "table includes...identifier for each of the published methods of an applications" (page 4, par 0030)], [i.e., "published methods" (page 4, par 0032)].

Regarding **claim 16, The computer equipment according to claim 14, wherein said data object is a Java Card type object** [i.e., “application is written in the Java programming language” (page 3, par 0020)], [i.e., “Java applet” (page 2, par 0019)] **and said register conforms to the “Java standard RMI registry” standard** [i.e., remote method invocation (RMI) framework (page 2, par 0019), (see figure 3)].

Regarding **claim 17, The computer equipment according to claim 15, wherein said data object is a Java Card type object** [i.e., “application is written in the Java programming language” (page 3, par 0020)], [i.e., “Java applet” (page 2, par 0019)] **and said register conforms to the “Java standard RMI registry” standard** [i.e., remote method invocation (RMI) framework (page 2, par 0019), (see figure 3)].

Regarding **claim 18, The microcircuit card according to claim 1, wherein said data object is a Java Card type object belonging to a Java Card applet** [i.e., “application is written in the Java programming language” (page 3, par 0020)], [i.e., “Java applet” (page 2, par 0019)], **the card being wherein said second local reference of said data object conforms to the Java Card standard** [i.e., Java RMI framework (see figure 2)]

Regarding **claim 19, The microcircuit card according to claim 1, wherein the first message comprises the logical identifier of the data object is an APDU message** [i.e., APDU command (see figures 2, 3 and 4)].

Regarding **claim 20, The computer equipment according to claim 10, wherein the means for obtaining are configured to obtain the second local**

**reference using APDU messages exchanged with the card** [i.e., command APDU, response APDU (see figure 2)].

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vandewalle further in view of Lagosanto et al. (US 6,807,561 B2) (hereinafter Lagosanto).

Vandewalle discloses;

Regarding **claim 9, The microcircuit card according to claim 1, wherein said second local reference is temporary** [i.e., the skeleton 22 decodes an APDU message into corresponding method invocation and encode the result to the method invocation to its corresponding APDU message according to the table (see figures 3, 5a and 5b)].

Vandewalle does not disclose;

obtained by encrypting the first local reference using an encryption key

However, Lagosanto discloses;

**obtained by encrypting the first local reference using an encryption key**  
[i.e., decrypt the message, verify a signature and/or other filtering operations (col. 7, lines 30 - 33)]

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Vandewalle by adapting the teachings of Lagosanto to maintain security level in a smart card.

### ***Response to Arguments***

9. Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Vandewalle (US 2004/0154027 A1) and Vandewalle ("New RMI Extension to the Java Card 2.1 API") disclose a smart card having substantially same features as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SYED RONI whose telephone number is (571)270-7806. The examiner can normally be reached on M - F (8:30 am - 5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sub Sough (Sam) can be reached on (571) 272 - 6799. The fax

phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SYED RONI/  
Examiner, Art Unit 2194

/Hyung S. SOUGH/  
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12/16/10